

20-5 IDENTIFYING SEISMIC DESIGN CRITERIA IN THE GENERAL NOTES

GENERAL NOTES EXAMPLES

The following examples show the format for presenting the seismic design criteria and seismic design loading in the General Notes on the contract plans. Each example illustrates a commonly used combination of design criteria and loading.

Example # 1:

General Notes for a bridge designed with the Bridge Design Specification (BDS), the SDC without modifications, and a standard SDC ARS curve.

GENERAL NOTES LOAD FACTOR DESIGN

Design: Caltrans Bridge Design Specifications-April 2000 (LFD)

(1996 AASHTO with Interims and Revisions by Caltrans)

Seismic

Design: Caltrans Seismic Design Criteria (SDC), Version 1.2 December

2001

Live

Loading: HS20-44 and alternative and permit design load

Seismic

Loading: SDC ARS Curve For Soil Profile C (M=6.5 ± .25)

(Peak Rock Acceleration = 0.6g)

Reinforced

Concrete: $f_{v} = 420 \text{ MPa}$

 $f'_{a} = 25 MPa$

n = 8

Prestressed

Concrete: See "Prestressing Notes"



Example # 2:

General Notes for a bridge designed with the BDS, the SDC with modifications, and a standard SDC ARS curve. A copy of the final SDC modifications shall be routed to the Structure Design Office Chiefs and the Earthquake Committee at bridge PS&E.

GENERAL NOTES LOAD FACTOR DESIGN

Design: Caltrans Bridge Design Specifications-April 2000 (LFD)

(1996 AASHTO with Interims and Revisions by Caltrans)

Seismic

Design: Caltrans Seismic Design Criteria (SDC), Version 1.2 December

2001 with modifications

Live

Loading: HS20-44 and alternative and permit design load

Seismic

Loading: SDC ARS Curve For Soil Profile C ($M=6.5 \pm .25$)

(Peak Rock Acceleration = 0.6g)

Reinforced

Concrete: $f_{y} = 420 \text{ MPa}$

 $f_a' = 25 MPa$

n = 8

Prestressed

Concrete: See "Prestressing Notes"



Example #3:

General Notes for a bridge designed with the BDS, the SDC without modifications, and a site-specific ARS curve.

GENERAL NOTES LOAD FACTOR DESIGN

Design: Caltrans Bridge Design Specifications-April 2000 (LFD)

(1996 AASHTO with Interims and Revisions by Caltrans)

Seismic

Design: Caltrans Seismic Design Criteria (SDC), Version 1.2 December

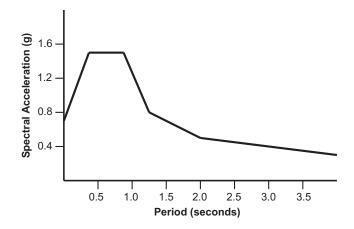
2001 with modifications

Live

Loading: HS20-44 and alternative and permit design load

Seismic

Loading: Site Specific Acceleration Response Spectra Curve



Reinforced

Concrete: $f_y = 420 \text{ MPa}$

 $f_c' = 25 MPa$

n = 8

Prestressed

Concrete: See "Prestressing Notes"



Example #4:

General Notes for a bridge designed with a project specific design criteria. A final copy of the project seismic design criteria shall be routed to the Structure Design Office Chiefs and the Earthquake Committee at bridge PS&E.

GENERAL NOTES LOAD FACTOR DESIGN

Design: Caltrans Bridge Design Specifications-April 2000 (LFD)

(1996 AASHTO with Interims and Revisions by Caltrans)

Seismic

Design: Project Specific Seismic Design Criteria for the Dry Creek Bridge

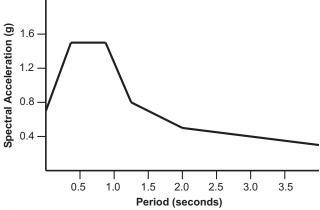
(Approved April 2001)

Live

Loading: HS20-44 and alternative and permit design load

Seismic

Loading: Site Specific Acceleration Response Spectra Curve



Reinforced

Concrete: $f_y = 420 \text{ MPa}$

 $f_a' = 25 MPa$

n = 8

Prestressed

Concrete: See "Prestressing Notes"